

SEQUENCE LISTING

JUL 31 2003

TECH CENTER 1600/2000

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<110> Nicklin, Martin
      Barton, Jenny
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<140> 09/617,720
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20 25 30

Ala Gly Lys Val Ile Lys Gly Glu Glu Ile Ser Val Val Pro Asn Arg 35 40 45

Trp Leu Asp Ala Ser Leu Ser Pro Val Ile Leu Gly Val Gln Gly Gly 50 55 60

Ser Gln Cys Leu Ser Cys Gly Val Gly Gln Glu Pro Thr Leu Thr Leu 65 70 75 80

Glu Pro Val Asn Ile Met Glu Leu Tyr Leu Gly Ala Lys Glu Ser Lys 85 90 95

Ser Phe Thr Phe Tyr Arg Arg Asp Met Gly Leu Thr Ser Ser Phe Glu 100 105 110

Ser Ala Ala Tyr Pro Gly Trp Phe Leu Cys Thr Val Pro Glu Ala Asp 115 120 125

Gln Pro Val Arg Leu Thr Gln Leu Pro Glu Asn Gly Gly Trp Asn Ala 130 135 140

Pro Ile Thr Asp Phe Tyr Phe Gln Gln Cys Asp 145 150 155

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Met Val Leu Ser Gly Ala Leu Cys Phe Arg Met Lys Asp Ser Ala Leu 1 5 10 15

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20 25 30

Ala Glu Lys Val Ile Lys Gly Glu Glu Ile Ser Val Val Pro Asn Arg
35 40 45

Ala Leu Asp Ala Ser Leu Ser Pro Val Ile Leu Gly Val Gln Gly Gly 50 55 60

Ser Gln Cys Leu Ser Cys Gly Thr Glu Lys Gly Pro Ile Leu Lys Leu

Glu Pro Val Asn Ile Met Glu Leu Tyr Leu Gly Ala Lys Glu Ser Lys 85 90 95

Ser Phe Thr Phe Tyr Arg Arg Asp Met Gly Leu Thr Ser Ser Phe Glu
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Ser Ala Ala Tyr Pro Gly Trp Phe Leu Cys Thr Ser Pro Glu Ala Asp 115 120 125

Gln Pro Val Arg Leu Thr Gln Ile Pro Glu Asp Pro Ala Trp Asp Ala 130 135 140

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Met Val Leu Ser Gly Ala Leu Cys Phe Arg Met Lys Asp Ser Ala Leu

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Ala Lys Val Ile Lys Gly Glu Glu Ile Ser Val Val Pro Asn Arg Leu 35 40 45

Asp Ala Ser Leu Ser Pro Val Ile Leu Gly Val Gln Gly Gly Ser Gln 50 55 60

Cys Leu Ser Cys Gly Pro Leu Leu Glu Pro Val Asn Ile Met Glu Leu 65 70 75 80

Tyr Leu Gly Ala Lys Glu Ser Lys Ser Phe Thr Phe Tyr Arg Arg Asp 85 90 95

Met Gly Leu Thr Ser Ser Phe Glu Ser Ala Ala Tyr Pro Gly Trp Phe 100 105 110

Leu Cys Thr Pro Glu Ala Asp Gln Pro Val Arg Leu Thr Gln Pro Glu
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Trp Ala Pro Ile Thr Asp Phe Tyr Phe Gln Gln Cys Asp 130 135 140

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<213> Homo sapiens

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20 25 30

Lys Ile Asp Val Val Pro Ile Glu Pro His Ala Leu Phe Leu Gly Ile 35 40 45

His Gly Gly Lys Met Cys Leu Ser Cys Val Lys Ser Gly Asp Glu Thr 50 60

Arg Leu Gln Leu Glu Ala Val Asn Ile Thr Asp Leu Ser Glu Asn Arg
65 70 75 80

Lys Gln Asp Lys Arg Phe Ala Phe Ile Arg Ser Asp Ser Gly Pro Thr
85 90 95

Thr Ser Phe Glu Ser Ala Ala Cys Pro Gly Trp Phe Leu Cys Thr Ala 100 105 110

Met Glu Ala Asp Gln Pro Val Ser Leu Thr Asn Met Pro Asp Glu Gly
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Val Met Val Thr Lys Phe Tyr Phe Gln Glu 130 135

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Glu Val Asn Ile Leu Lys Lys Phe Phe Arg Asp Gly Thr Ser Phe Glu 35 40 45

Ser Ala Ala Pro Gly Trp Phe Leu Cys Thr Glu Ala Asp Gln Pro Val 50 55 60

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<223> Description of Artificial Sequence: Recombinant IBR polypeptide

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Ala Gly Lys Val Ile Lys Gly Glu Glu Ile Ser Val Val Pro Asn Arg 35 40 45

Trp Leu Asp Ala Ser Leu Ser Pro Val Ile Leu Gly Val Gln Gly Gly 50 55 60

Ser Gln Cys Leu Ser Cys Gly Val Gly Gln Glu Pro Thr Leu Thr Leu 65 70 75 80

Glu Pro Val Asn Ile Met Glu Leu Tyr Leu Gly Ala Lys Glu Ser Lys 85 90 95

Ser Phe Thr Phe Tyr Arg Arg Asp Met Gly Leu Thr Ser Ser Phe Glu
100 105 110

Ser Ala Ala Tyr Pro Gly Trp Phe Leu Cys Thr Val Pro Glu Ala Asp 115 120 125

Gln Pro Val Arg Leu Thr Gln Leu Pro Glu Asn Gly Gly Trp Asn Ala 130 135 140

Pro Ile Thr Asp Phe Tyr Phe Gln Gln Cys Asp 145 150 155

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Val Leu Ser Gly Ala Leu Cys Phe Arg Met Lys Asp Ser Ala Leu Lys 1 5 10 15

Val Leu Tyr Leu His Asn Asn Gln Leu Leu Ala Gly Gly Leu His Ala 20 25 30

Gly Lys Val Ile Lys Gly Glu Glu Ile Ser Val Val Pro Asn Arg Trp
35 40 45

Leu Asp Ala Ser Leu Ser Pro Val Ile Leu Gly Val Gln Gly Gly Ser 50 55 60

- Gln Cys Leu Ser Cys Gly Val Gly Gln Glu Pro Thr Leu Thr Leu Glu
 65 70 75 80
- Pro Val Asn Ile Met Glu Leu Tyr Leu Gly Ala Lys Glu Ser Lys Ser 85 90 ° 95
- Phe Thr Phe Tyr Arg Arg Asp Met Gly Leu Thr Ser Ser Phe Glu Ser 100 105 110
- Ala Ala Tyr Pro Gly Trp Phe Leu Cys Thr Val Pro Glu Ala Asp Gln
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- Leu His Ala Gly Lys Val Ile Lys Gly Glu Glu Ile Ser Val Val Pro 35 40 45
- Asn Arg Trp Leu Asp Ala Ser Leu Ser Pro Val Ile Leu Gly Val Gln 50 55 60
- Gly Gly Ser Gln Cys Leu Ser Cys Gly Val Gly Gln Glu Pro Thr Leu 65 70 75 80
- Thr Leu Glu Pro Val Asn Ile Met Glu Leu Tyr Leu Gly Ala Lys Glu 85 90 95
- Ser Lys Ser Phe Thr Phe Tyr Arg Arg Asp Met Gly Leu Thr Ser Ser 100 105 110
- Phe Glu Ser Ala Ala Tyr Pro Gly Trp Phe Leu Cys Thr Val Pro Glu 115 120 125
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Ala Gly Lys Val Ile Lys Gly Glu Glu Ile Ser Val Val Pro Asn Arg 35 40 45

Trp Leu Asp Ala Ser Leu Ser Pro Val Ile Leu Gly Val Gln Gly Gly 50 55 60

Ser Gln Cys Leu Ser Cys Gly Val Gly Gln Glu Pro Thr Leu Thr Leu 65 70 75 80

Glu Val Asn Ile Met Glu Leu Tyr Leu Gly Ala Lys Glu Ser Lys Ser 85 90 95

Phe Thr Phe Tyr Arg Arg Asp Met 100

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<211> 100

<212> PRT

<213> Homo sapiens

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Lys Thr Phe Tyr Leu Arg Asn Asn Gln Leu Val Ala Gly Tyr Leu Gln
20 25 30

Gly Pro Asn Val Asn Leu Glu Glu Lys Ile Asp Val Val Pro Ile Glu
35 40 45

Pro His Ala Leu Phe Leu Gly Ile His Gly Gly Lys Met Cys Leu Ser 50 55 60

Cys Val Lys Ser Gly Asp Glu Thr Arg Leu Gln Leu Glu Val Asn Ile 65 70 75 80

Thr Asp Leu Ser Glu Asn Arg Lys Gln Asp Lys Arg Phe Ala Phe Ile 85 90 95

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Val Pro Ile Glu Pro His Ala Leu Phe Leu Gly Ile His Gly Gly Lys
50 55 60

Met Cys Leu Ser Cys Val Lys Ser Gly Asp Glu Thr Arg Leu Gln Leu 65 70 75 80

Glu Ala Val Asn Ile Thr Asp Leu Ser Glu Asn Arg Lys Gln Asp Lys
85 90 95

Arg Phe Ala Phe Ile Arg Ser Asp Ser Gly Pro Thr Thr Ser Phe Glu
100 105 110

Ser Ala Ala Cys Pro Gly Trp Phe Leu Cys Thr Ala Met Glu Ala Asp 115 120 125

Gln Pro Val Ser Leu Thr Asn Met Pro Asp Glu Gly Val Met Val Thr 130 135 140

Lys Phe Tyr Phe Gln Glu Asp Glu 145 150

<210> 45

<211> 153

<212> PRT

<213> Homo sapiens

<400> 45

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Gly Glu Glu Ser Asn Asp Lys Ile Pro Val Ala Leu Gly Leu Lys Glu
50 55 60

Lys Asn Leu Tyr Leu Ser Cys Val Leu Lys Asp Asp Lys Pro Thr Leu 65 70 75 80

Gln Leu Glu Ser Val Asp Pro Lys Asn Tyr Pro Lys Lys Met Glu 85 90 95

Lys Arg Phe Val Phe Asn Lys Ile Glu Ile Asn Asn Lys Leu Glu Phe 100 105 110

Glu Ser Ala Gln Phe Pro Asn Trp Tyr Ile Ser Thr Ser Gln Ala Glu 115 120 125

Asn Met Pro Val Phe Leu Gly Gly Thr Lys Gly Gly Gln Asp Ile Thr 130 135 140

Asp Phe Thr Met Gln Phe Val Ser Ser 145 150

<210> 46

<211> 159

<212> PRT

<213> Homo sapiens

<400> 46

Ser Ala Pro Phe Ser Phe Leu Ser Asn Val Lys Tyr Asn Phe Met Arg 1 10 15

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Ile Arg Ala Asn Asp Gln Tyr Leu Thr Ala Ala Ala Leu His Asn Leu
35 40 45

Asp Glu Ala Val Lys Phe Asp Met Gly Ala Tyr Lys Ser Ser Lys Asp 50 55 60

Asp Ala Lys Ile Thr Val Ile Leu Arg Ile Ser Lys Thr Gln Leu Tyr 65 70 75 80

Val Thr Ala Gln Asp Glu Asp Gln Pro Val Leu Leu Lys Glu Met Pro 85 90 95

Glu Ile Pro Lys Thr Ile Thr Gly Ser Glu Thr Asn Leu Leu Phe Phe 100 105 110

Trp Glu Thr His Gly Thr Lys Asn Tyr Phe Thr Ser Val Ala His Pro 115 120 125

Asn Leu Phe Ile Ala Thr Lys Gln Asp Tyr Trp Val Cys Leu Ala Gly 130 135 140

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<213> Homo sapiens
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Met Thr Asp Ser Asp Cys Arg Asp Asn Ala Pro Arg Thr Ile Phe Ile
Ile Ser Met Tyr Lys Asp Ser Gln Pro Arg Gly Met Ala Val Thr Ile
Ser Val Lys Cys Glu Lys Ile Ser Thr Leu Ser Cys Glu Asn Lys Ile
                                  . 75
                     70
Ile Ser Phe Lys Glu Met Asn Pro Pro Asp Asn Ile Lys Asp Thr Lys
                                     90
Ser Asp Ile Ile Phe Phe Gln Arg Ser Val Pro Gly His Asp Asn Lys
                                105
Met Gln Phe Glu Ser Ser Tyr Glu Gly Tyr Phe Leu Ala Cys Glu
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                            120
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Lys Glu Arg Asp Leu Phe Lys Leu Ile Leu Lys Lys Glu Asp Glu Leu
Gly Asp Arg Ser Ile Met Phe Thr Val Gln Asn Glu Asp
<210> 48
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<222> (1)..(6)
<223> Xaa represents a variable amino acid
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      peptide sequence
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  1
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<213> Artificial Sequence
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      peptide sequence
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 1
                  5
                                      10
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<211> 9
<212> PRT
<213> Artificial Sequence
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      peptide sequence
<220>
<221> MOD_RES
<222> (1)..(9)
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<210> 52
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     peptide sequence
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Phe Gly Phe Arg
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<211> 13
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<213> Homo sapiens
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<221> misc_feature
<222> (7)..(8)
<223> Wherein n is a or t or c or g.
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<221> misc_feature
<222> (10)
<223> Wherein n is a or t or c or g.
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<213> Homo sapiens
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<213> Mus musculus
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